

This section describes the existing environmental conditions of the General Plan Planning Area and identifies the methods used in analyzing the General Plan's potential to create hazards to the public health or the environment related to hazardous materials, substances, or waste and also identifies other potential hazards that may impact public safety. Appropriate mitigation measures are identified to reduce, lessen, or eliminate the General Plan's impacts. For impacts related to flood hazards, the reader is referred to Section 4.9, Hydrology and Water Quality. For impacts related to fire hazards, the reader is referred to Section 4.12, Public Services and Utilities.

4.4.1 EXISTING SETTING

HAZARDOUS MATERIALS DEFINED

Under Title 22 of the California Code of Regulations (CCR), the term hazardous substance refers to both hazardous materials and hazardous wastes and both are classified according to four properties: toxicity, ignitability, corrosiveness, and reactivity (CCR Title 22, Chapter 11, Article 3). A hazardous material is defined as a substance or combination of substances that may cause or significantly contribute to an increase in serious, irreversible, or incapacitating illness, or may pose a substantial presence or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been discarded, discharged, spilled, or contaminated or are being stored until they can be disposed of properly (CCR Title 22, Chapter 11, Article 2, Section 66261.10). Soil that is excavated from a site containing hazardous materials is a hazardous waste if it exceeds specific CCR Title 22 criteria. While hazardous substances are regulated by multiple agencies, as described below in Section 4.4.2, Regulatory Framework, cleanup requirements of hazardous wastes are determined on a case-by-case basis according to the agency with lead jurisdiction over the project.

Public health is potentially at risk whenever hazardous materials are, or will, be used. It is necessary to differentiate between the "hazard" of these materials and the acceptability of the "risk" they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. The risk to health and public safety is determined by the probability of exposure, in addition to the inherent toxicity of a material (California Department of Toxic Substances Control, <http://www.dtsc.ca.gov/>).

Factors that can influence the health effects when human beings are exposed to hazardous materials include: the dose the person is exposed to, the frequency of exposure, the duration of exposure, the exposure pathway (route by which a chemical enters a person's body), and the individual's unique biological susceptibility.

Transportation of Hazardous Materials

The transportation of hazardous materials within the General Plan Planning Area is subject to various federal, state, and local regulations, as described in Section 4.4.2, Regulatory Framework. According to the California Highway Patrol (CHP), US 50 and State Route 16 (Jackson Road) are the only approved transportation routes in the Planning Area for the transportation of explosives. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery, or the loading of such materials (California Vehicle Code §§ 31602(b), 32104(a)).

The California Highway Patrol also designates through routes to be used for the transportation of inhalation hazards and may designate separate through routes for the transportation of

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inhalation hazards composed of any chemical rocket propellant (California Vehicle Code, Section 32100 and Section 32102(b)). US 50 east to Prairie City Road is the only approved transportation route in the Planning Area for the transportation of poisonous inhalation hazards. These materials are highly toxic, spread rapidly, and require rapid and widespread evacuation if there is loss of containment or a fire. These inhalation hazards and poisonous gases are subject to additional safeguards.

There are no approved transportation routes within the Planning Area for the transportation of radioactive materials. However, Highway 80, located over 5 miles northwest of the Planning Area, has been approved for the transportation of radioactive materials, as well as explosives and poisonous inhalation hazards (CHP, pers. comm., 2006).

Light Rail Transit (LRT) service is provided from Downtown Sacramento along the US-50 corridor to the Sunrise Boulevard Station. For further discussion on light rail transportation, the reader is referred to Section 4.5, Transportation and Circulation. The Union Pacific Railway maintains a freight line that runs through the proposed Planning Area and is co-located with LRT, serving spurs between Sunrise Boulevard and Aerojet to the east. This railway line could potentially serve as transportation for hazardous materials. However, any such transportation would be required to remain in compliance with State and Federal laws for the transportation of hazardous materials on railroads.

HAZARDOUS MATERIAL AND WASTE SITES

The State of California Hazardous Waste and Substances Site List (also known as the "Cortese List") is a planning document used by state, local agencies, and developers to comply with the California Environmental Quality Act (CEQA) requirements in providing information about the location of hazardous materials sites. California Government Code Section 65962.5 requires the California Environmental Protection Agency (CAL-EPA) to annually update the Cortese List. The CAL-EPA Department of Toxic Substances Control (DTSC) is responsible for preparing a portion of the information that comprises the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information that is part of the complete list. DTSC's Site Mitigation and Brownfields Reuse Program EnviroStor database provides DTSC's component of Cortese List data by identifying State Response and/or Federal Superfund and backlog sites listed under Health and Safety Code section 25356. In addition, DTSC's Cortese List includes Certified with Operation and Maintenance sites. Following is the DTSC Site Mitigation and Brownfields Reuse Program information for the Rancho Cordova General Plan Planning Area, also included in DTSC's component of the Cortese List and available in EnviroStor:

- 1) Aerojet General Corporation, Federal Superfund Site and Active
- 2) E & J Manufacturing, State Response and Certified
- 3) ESS Laboratory, State Response and Certified
- 4) Golden West Homes (GPM), State Response and Certified
- 5) Hazel Avenue Ponds, State Response and De-Listed
- 6) Mather Air Force Base, Federal Superfund Site and Active

- 7) McDonnell Douglas Inactive Test Site (also known as the Inactive Rancho Cordova Test Site or IRCTS), State Response and Active
- 8) Pittsburg Des Moines Steel, State Response
- 9) Purity Oil Sales- Delta Gunite, State Response and Active
- 10) Sunrise River Industrial Park, State Response and Certified
- 11) Village of Zinfandel, Voluntary Cleanup and No Further Action

Locations of the above active sites are illustrated in **Figure 4.4-1**, State and Federal Hazardous Waste Sites and Areas of Contamination within the General Plan Planning Area. Mather Air Force Base, Aerojet General Corporation facilities, as well as the IRCTS facilities are areas of primary concern within the Planning Area and thus discussed in greater detail below.

In addition to EnviroStor, the CAL-SITES Abandoned Sites Information System (ASPIS) database, compiled by CAL-EPA, can also be used to identify and track potential hazardous waste sites. In addition, the County of Sacramento's Department of Environmental Health maintains lists of hazardous material sites, releases, and accident occurrences. Both sources of information are regularly uploaded to the State's Geographic Environmental Information Management System (GEIMS) so that agencies and the general public can access information regarding a specific site. GEIMS, a data warehouse which tracks regulatory data regarding leaking underground fuel tanks (LUFTs), other contaminant release sites, water quality information, water use information, and infrastructure data, can be used to identify properties that are known or have had contaminant spills. GeoTracker, the interface to GEIMS, uses commercially available software to allow users to access data from GEIMS over the Internet. According to the GEIMS database, there are approximately 150 leaking underground fuel tanks (LUFTs) and 2 SLIC (Spills, Leaks, Investigations, and Clean-Up) sites within the Planning Area. **Figure 4.4-2** illustrates the locations of these contaminant sources. The GEIMS file is included in **Appendix 4.4**.

Mather Air Force Base

Mather Air Force Base (AFB), comprised of approximately 5,845 acres within the south-central portion of the Rancho Cordova General Plan Planning Area, was established in 1918. Starting in 1941, its primary mission was to train navigators to operate advanced navigation, bombing, missile and electronic warfare systems. The Air Force Base's industrial activities included vehicle, aircraft, and weapons maintenance. Mather Air Force Base was decommissioned by the federal government and officially closed in September 1993. At the time of decommission, the runways and associated facilities became Mather Airport.

A total of 89 potentially contaminated sites have been identified. These sites include: landfills, fire training areas, fuel spill areas, fuel storage areas, sewage treatment areas, firing ranges, drainage areas, and an area associated with the Air Force Base dry cleaning facility. Soil and groundwater are contaminated with volatile organic compounds (VOCs), including trichloroethylene (TCE) and tetrachloroethylene (PCE), and hydrocarbons associated with fuels.

In October 1989, the U.S. Air Force, EPA and DTSC entered into a Federal Facilities Agreement (FFA) for Mather AFB. The FFA allows for state oversight at contaminated sites. Since the closure of Mather in 1993, approximately 1300 acres have been transferred under state oversight. The Agency for Toxic Substances and Disease Registry (ATSDR), an agency of the U.S. Department of Health and Human Services, concluded under the Comprehensive Environmental Response,

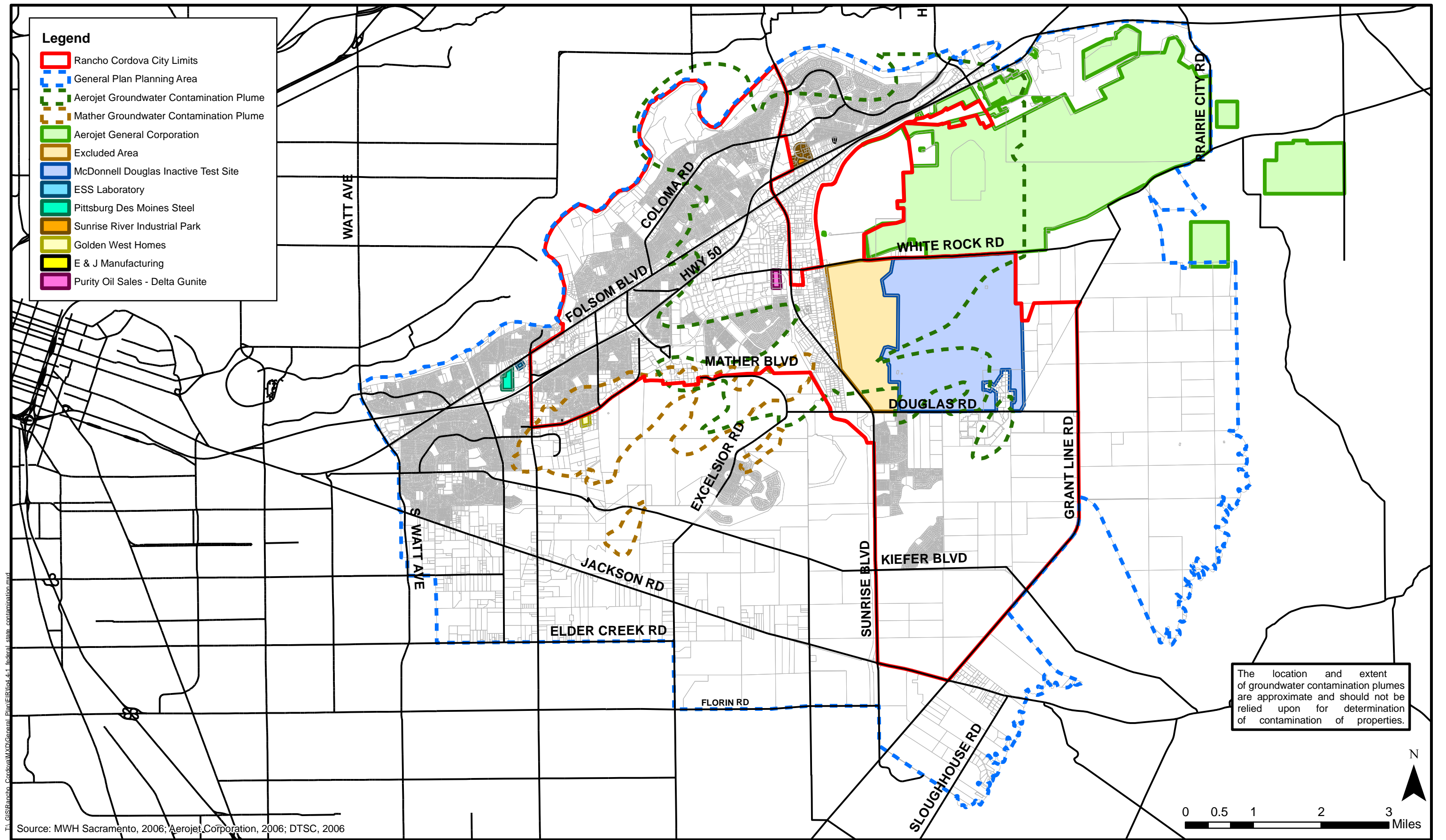
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Compensation, and Liability Act (CERCLA), commonly known as "the Superfund Act", that the exposure situations at Mather Air Force Base pose no apparent public health hazards. Mather Air Force Base was divided into six Operable Units (OUs). The U.S. Air Force and community water suppliers have closed contaminated wells, installed treatment systems, and currently monitor active wells regularly. Regular monitoring includes collecting quarterly samples from on-base supply systems, off-base community supply systems, and private wells to the west and south and analyzing the samples for VOCs and/or perchlorate. The U.S. Air Force also connected homes and businesses with private wells on the west to the community water supply system. These measures are being used to prevent current and future exposures to contaminants that may pose potential public health hazards. In order to prevent current and future exposures to contaminants at levels of health concern in surface waters and sediment, the U.S. Air Force is completing remedial actions with oversight by the U.S. EPA and CAL-EPA (DTSC Report on Mather Air Force Base, http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=34970003).

Aerojet General Corporation Site

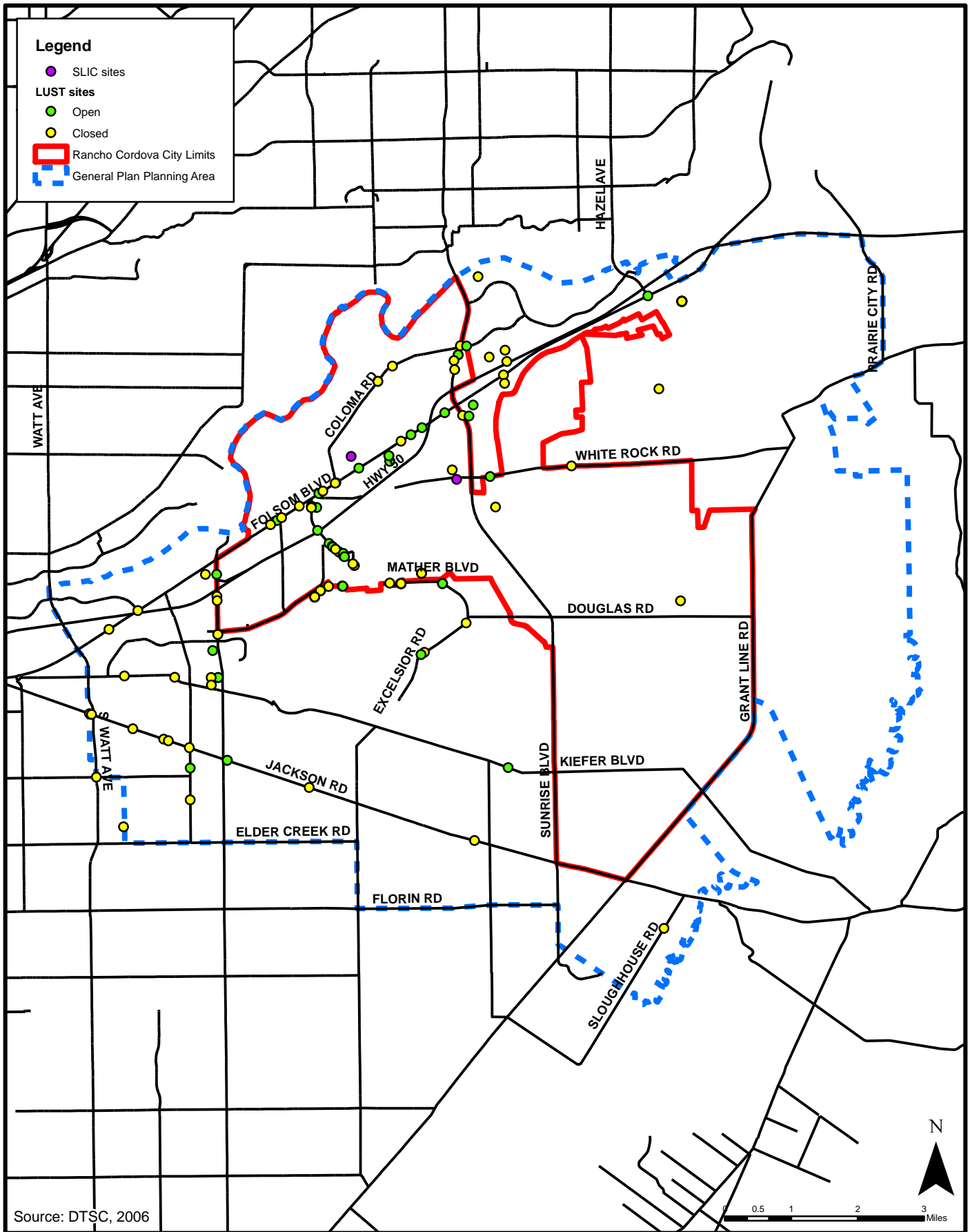
The Aerojet General Corporation site covers approximately 5,900 acres within the northeastern section of the Planning Area (see **Figure 4.4-1**). The northeastern edge of the site is about 1/2 mile from the American River. Since 1953, Aerojet and its subsidiaries have manufactured liquid and solid propellant rocket engines for military and commercial applications and have formulated a number of chemicals, including: rocket propellant agents, agricultural, pharmaceutical, and other industrial chemicals. In addition, the Cordova Chemical Company operated chemical manufacturing facilities on the Aerojet complex from 1974 to 1979. Both companies disposed of unknown quantities of hazardous waste chemicals, including TCE and other chemicals associated with rocket propellants, as well as various chemical processing wastes. Some wastes were disposed of in surface impoundments, landfills, deep injection wells, leachate fields, and some were disposed of by open burning. Underlying the site are extensive 40 to 100 foot-deep dredge tailings, a remnant of past gold mining operations (DTSC Report on Aerojet General Corporation, http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=34370002).

Environmental investigations at the site began in 1979. There is soil contamination, both onsite and in areas east of the site. Groundwater contamination has been defined in a number of discrete plumes that move out radially to the north, west, and south of the site. The site is fenced and access is controlled. The major contaminants found both onsite and offsite are solvents such as TCE and chloroform and rocket fuel by-products such as N-Nitrosodimethylamine (NDMA) and perchlorate. Contaminants at the site are present in a wide range of concentrations. Aerojet installed and is operating six groundwater extraction and treatment (GET) systems at the site boundaries to prevent further offsite migration. In addition, Aerojet has conducted a number of removal actions for onsite soils, liquids, and sludges. In 1989, Aerojet, EPA, the Regional Water Quality Control Board (RWQCB) and DTSC signed a Partial Consent Decree to complete a comprehensive Remedial Investigation/ Feasibility Study (RI/FS), maintain the current GET systems, and take any necessary removal actions. In July of 1998, the Partial Consent Decree was modified to include monitoring public water supplies for the chemical perchlorate, replacing water supplies impacted by perchlorate, annual updates to the monitoring plan for public water supplies, and reducing the discharge limit for N-nitrosodimethylamine at currently operating groundwater extraction and treatment facilities (DTSC Report on Aerojet General Corporation, http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=34370002).



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Figure 4.4-1
State and Federal Hazardous Waste Sites and Areas of Contamination
Within the General Plan Planning Area



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City of Rancho Cordova
Planning Department

Figure 4.4-2
Leaking Underground Storage Tanks and SLIC Sites
Within the General Plan Planning Area

The Inactive Rancho Cordova Test Site and Excluded Area

The approximately 2,728 acres of land referred to as the Inactive Rancho Cordova Test Site (IRCTS), also known as the McDonnell Douglas Facilities, along with approximately 1,100 acres of land referred to as the "Excluded Area", are located between White Rock Road and Douglas Boulevard and between Sunrise Boulevard and west of Grant Line Road within the Rio del Oro Planning Area. Gold dredging activities took place over approximately 70% of the area from the early 1900s until 1962. During the later years, from 1940 to 1962, these operations were conducted by the Natomas Company. In 1956, Aerojet purchased the project site from the Natomas Company and leased half of it to the Douglas Aircraft Company (DAC). In 1961, DAC purchased the entire property from Aerojet and established a static rocket assembly and testing facility known as the Sacramento Test Center. DAC merged with the McDonnell Aircraft Corporation in 1967 to become the McDonnell Douglas Corporation (MDC). During this time, from approximately 1956 to 1972, the site was utilized for the assembly and testing of rocket systems and rocket components. The last static rocket test occurred in 1969. The site consisted of seven areas, six utilized as test areas and one area serving for engineering and administration (now known as "Security Park"). Several areas of contamination have been identified at the site, including: landfills, propellant burn areas, and a rice hull burn area. During the processes involved in cleaning tested materials and maintaining test areas, numerous solvents including chlorinated solvents, were utilized. Fuels utilized in testing included: RP-1, hydrazine, ammonium perchlorate, and liquid hydrogen/oxygen. Releases to soil, surface water, and groundwater of chlorinated solvents and fuels were detected during the Preliminary Endangerment Assessment (PEA).

The Sacramento Test Center was deactivated between 1972 and 1977, which included demolition of the test stand superstructures. In 1984, Aerojet reacquired the 3,828-acre property from MDC and used a small area for the discharge of treated groundwater. The total area actually used by MDC and Aerojet included less than 350 acres of the 3,828-acre property. More than 90% of the 3,828-acre site served as a passive buffer on which no operations took place.

In 1979, TCE and other VOCs were detected in the groundwater on and surrounding the Aerojet National Priorities List (NPL) Site north of the IRCTS and north of White Rock Road, outside of the Rio del Oro Planning Area. Investigations indicated that part of the contaminant plume was migrating southwest toward the IRCTS. In addition, soil at the IRCTS has been shown to be contaminated with TCE, freon, methylene chloride, kerosene, perchlorate, dioxins and furans, lead, and other metals.

In November 1991, DTSC issued an Imminent and Substantial Endangerment Order (ISEO) to Aerojet and MDC to address the issue of TCE in a well located west of the IRCTS. Issuance of the ISEO established the IRCTS as a State Superfund site. Under the ISEO, MDC is responsible for evaluating the potential release of hazardous substances at the IRCTS due to MDC historical activities; and Aerojet is responsible due to its ownership of the property. Under the provisions of the 1989 Partial Consent Decree (PCD) between Aerojet, the U.S. EPA, and state regulatory agencies, Aerojet is required to address the potential release of hazardous substances at all areas where Aerojet conducted operations.

In 1994, a second ISEO was negotiated with the DTSC that superseded the 1991 ISEO. In June 1997, the Central Valley Regional Water Quality Control Board (CVRWQCB) issued Cleanup and Abatement Order (CAO) No. 97-093 to Aerojet and MDC for the investigation of perchlorate in groundwater beneath and downgradient of the IRCTS. In addition, the Abatement Order

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requires implementation of corrective action for the perchlorate plume, and monthly sampling of municipal water supply wells at Mather Field for perchlorate analysis.

Since 1997, the Boeing Company purchased the McDonnell Douglas Corporation and has since become responsible for completing MDC's portion of the remedial action work. Aerojet and Boeing have constructed numerous monitoring wells throughout the Rio del Oro Planning Area, within roadways west of Rio del Oro, on private land south of Rio del Oro, and throughout the eastern half of Mather Field. In 2000, the RWQCB revised the original CAO to implement the recommendations for remedial action as a result of the ongoing investigation of Mather Field. Aerojet and Boeing are required to monitor select municipal wells on a quarterly basis, and to provide replacement water for affected wells.

To structure the study of soil and groundwater within the IRCTS, Aerojet and MDC divided the IRCTS into sub-areas that are identified as Operable Units (OUs). The OU designations define each study area boundary for the purpose of investigating the presence of chemical contaminants. Soil investigations at each of the Operable Units include the collection of soil, soil vapor, and/or sediment samples. The samples are analyzed for: VOCs, metals, hydrazine, NDMA, polychlorinated biphenyls (PCBs), perchlorate, and/or kerosene. For specific information regarding the IRCTS Operable Units, the reader is referred to the Rio del Oro Specific Plan Project Draft Environmental Impact Report/ Draft Environmental Impact Statement, available at the City of Rancho Cordova located at 2729 Prospect Park Drive, Rancho Cordova, California 95670. Since the identification of these Operable Units, one report has been submitted recognizing two new problem areas located on the west side of the By-Dry Operable Unit that consist of burn residuals in soil samples, including heavy metals. Remediation plans for these two new areas are planned for the summer of 2006 (pers. comm., Fricke, 2006).

The Excluded Area, which served as a buffer zone and was not used for aerospace testing or other industrial activities, encompasses approximately 1,100 acres immediately west of the IRCTS. Aerojet completed an extensive study of the Excluded Area in search of evidence that historic aerospace/industrial activities (post gold mining via dredging) may have resulted in chemical contaminants being released to soil within the area. Findings from the study concluded that the Excluded Area did not contain sources of chemical contamination as a result of aerospace/industrial activities. However, evidence of trash from illegal dumping activities (trash and junk cars), empty drums, and oily/tarry soils were encountered at various locations around the perimeter of readily accessible dredge tailings and at a former ranch site. The oily soils were located at the ranch site and contained diesel fuel and motor oil and trace amounts of polychlorinated biphenyls (PCBs). The tarry soils were located along Sunrise Boulevard. Following cleanup activities that included removal of the contaminated soil, trash, junk cars, and drums, DTSC issued a determination in 1997 to redefine the IRCTS to remove the 1,100-acre Excluded Area from the 1994 ISEO. The Excluded Area was purchased by Elliott Homes, Inc. in 2001.

Although the soils beneath the Excluded Area are considered clean, groundwater beneath the Excluded Area, which is between 100 and 150 feet below the ground surface, is contaminated primarily with VOCs (primarily TCE), and perchlorate. To address DTSC concerns about the contaminated groundwater, Aerojet reserved all rights to water lying below the surface of the Excluded Area and granted easements to Aerojet and DTSC for the installation of monitoring wells, extraction wells, and pipelines in order to address the remediation of the contaminated groundwater. These deed restrictions prohibit use of this groundwater for potable or irrigation water supply wells without DTSC approval.

GROUNDWATER REMEDIATION

In November 2000, the EPA proposed a plan to clean up the plume of groundwater contamination to the west of the Aerojet property and to ensure continued safe water supplies for area residents. The EPA signed a Record of Decision in July 2001 to formally approve the cleanup plan for the former Aerojet site, called the Western Groundwater Operable Unit. Part of the cleanup plan includes both short- and long-term contingency planning for drinking water supply wells. Aerojet has installed wells, pipelines, and in treatment systems for the first phase of this effort. In June 2003, Aerojet sampled groundwater at Rossmoor Bar Park at the known edge of the contamination plume, to investigate a potential site for a new drinking water well to replace wells already lost to contamination in the Western Groundwater area. Analysis revealed that the groundwater is contaminated with NDMA, trichloroethane or TCE, and perchlorate. Further sampling of existing wells showed that the NDMA plume extends northwest underneath the American River and below the southern edge of Carmichael. Historical research indicates that the source of this contamination plume may be from past discharge via Buffalo Creek into former sand-mining pits just south of the American River.

In an effort to contain the contamination plume, MDC is constructing a Groundwater Treatment and Extraction (GET) system consisting of wells and conveyance pipelines to pump groundwater from the leading edge of the contamination plume to a central treatment plant. The ultimate discharge locations of the treated groundwater are currently being evaluated. In accordance with RWQCB requirements, Aerojet has submitted an Operation, Maintenance, and Monitoring Plan for the GET system to the City of Rancho Cordova for review. The proposed project includes sixteen groundwater monitoring wells and two groundwater extraction wells, which are part of the GET system. The on-site monitoring and extraction wells will convey the contaminated water to the main treatment plant, which will be located off of Sunrise Boulevard, east of the Folsom South Canal. The EPA has also directed Aerojet to install monitoring wells and treat the contamination plume that exists in Carmichael, north of the American River. The main treatment facility is anticipated to treat approximately 6,000 gallons per minute of contaminated groundwater. The reader is referred to Section 4.9 (Hydrology and Water Quality) regarding the proposed Eastern County Replacement Water Supply Project that would utilize remediated water.

RESIDUAL AGRICULTURAL CHEMICALS

Portions of the Planning Area, generally in the southeastern portion, have been used for dry farming and livestock grazing. Persistent residual chemicals are not typically associated with these types of agricultural activities as irrigated pasture and natural grasses typically require little to no application of pesticides. However, persistent residual chemicals may be present at differing levels within the Planning Area, including over-the-counter insecticides and herbicides as well as chemicals that were banned years ago.

Orchards, especially, are often associated with the repeated application of herbicides and/or pesticides to fruit or nut trees. Various fruit orchard operations that were once located within the Planning Area may have used residual agricultural related chemicals, potentially affecting the on-site soils. The two fruit orchards of most concern are located north of Douglas Road, within the Sunrise Douglas Community Plan area.

Waterways within the Planning Area that are included on the RWQCB 303(d) list of Impaired Waterbodies are due to concerns over the pollutants diazinon and chlorpyrifos, both of which are insecticides used to control pests on crops as well as individual home use.

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Diazinon is a nonsystemic organophosphate insecticide classified as a Restricted Use Pesticide (RUP) and is for professional pest control operator use only. In 1988, EPA canceled registration of diazinon for use on golf courses and sod farms because of die offs of birds that often congregated in these areas. Diazinon is used to control cockroaches, silverfish, ants, and fleas in residential, non-food buildings. Bait is used to control scavenger yellow jackets in the western U.S. It is used on home gardens and farms to control a wide variety of sucking and leaf eating insects. It is also used on rice, fruit trees, sugarcane, corn, tobacco, potatoes and on horticultural plants and used as an ingredient in pest strips. Diazinon may be found in formulations with a variety of other pesticides, including pyrethrins, lindane, and disulfoton. Birds are significantly more susceptible to diazinon poisoning than other wildlife and it is highly toxic to fish and to bees. Diazinon has a low persistence in soil. Diazinon seldom migrates below the top half inch in soil, but in some instances it may contaminate groundwater. Diazinon is absorbed by plant roots when applied to the soil and translocated to other parts of the plant.

Chlorpyrifos is a broad-spectrum organophosphate insecticide classified as a General Use Pesticide. While originally used primarily to kill mosquitoes, it is no longer registered for this use. Chlorpyrifos is effective in controlling cutworms, corn rootworms, cockroaches, grubs, flea beetles, flies, termites, fire ants, and lice. It is used as an insecticide on grain, cotton, field, fruit, nut and vegetable crops, and well as on lawns and ornamental plants. It is also registered for direct use on sheep and turkeys, for horse site treatment, dog kennels, domestic dwellings, farm buildings, storage bins, and commercial establishments. Chlorpyrifos acts on pests primarily as a contact poison, with some action as a stomach poison. Chlorpyrifos is moderately to very highly toxic to birds and highly toxic to freshwater fish, aquatic invertebrates, and estuarine and marine organisms. Due to its high acute toxicity and its persistence in sediments, chlorpyrifos may represent a hazard to smaller organisms. Aquatic and general agricultural uses of chlorpyrifos pose a serious hazard to wildlife and honeybees.

Additional persistent chemicals that may be found within the Planning Area include toxaphene and lead arsenate. Toxaphene is an insecticide containing over 670 chemicals, also known as camphechlor, chlorocamphene, polychlorocamphene, or chlorinated camphene. It is usually found as a solid or gas, and in its original form is a yellow to amber waxy solid that smells like turpentine. Toxaphene was one of the most heavily used insecticides in the United States until 1982, when it was canceled for most uses; all uses were banned in 1990. Toxaphene was used primarily to control insect pests on cotton and other crops. It was also used to control insect pests on livestock and to kill unwanted fish in lakes.

Lead arsenate is a form of inorganic arsenic (22% arsenic) that normally exists as white crystals with no discernible odor. Associated with row crops and orchards, lead arsenate is currently used as a growth regulator on 17% of the U.S. grapefruit crop and 10,000 pounds of lead arsenate are used annually to control cockroaches, silverfish and crickets, according to the Environmental Protection Agency. Frequent applications of lead arsenate, at increasing rates over time, eventually caused lead and arsenic to accumulate in the topsoil.

NATURALLY OCCURRING ASBESTOS AND ASBESTOS CONTAINING MATERIALS

Asbestiform minerals are found in many geologic settings worldwide, and adverse health effects are attributable to them in a wide variety of circumstances. Asbestiform minerals are generally associated with the metamorphism of ultramafic rocks, but the various asbestiform minerals can be found in association with a wide variety of geological environments, including sedimentary and igneous. According to the California Geological Survey's Mineral Hazards Mapping Program, and given the geological conditions of the Planning Area, the issue of naturally occurring asbestos is not expected to be an issue of concern. The reader is referred to Section

4.8, Geology and Soils, for further discussion of the geologic and soils conditions within the Planning Area.

Although still in legal production, the Clean Air Act (CAA) requires EPA to develop and enforce regulations to protect the general public from exposure to airborne contaminants that are known to be hazardous to human health. In accordance with Section 112 of the CAA, EPA established National Emission Standards for Hazardous Air Pollutants (NESHAP). Asbestos was one of the first hazardous air pollutants regulated under Section 112. The Asbestos NESHAP is intended to minimize the release of asbestos fibers during activities involving the handling of asbestos. Accordingly, it specifies removal of asbestos and work practices to be followed prior to renovations and demolitions of buildings that contain a certain threshold amount of friable asbestos. The Asbestos NESHAP also regulates asbestos waste handling and disposal.

More than likely, there are several structures within the General Plan Planning Area that contain asbestos and asbestos containing building materials. IRCTS facilities, discussed previously, contain numerous concrete, steel, and wood structures that supported the historic rocket testing and assembly activities. These structures were constructed at a time when asbestos containing materials and lead-based paints were used.

The presence of asbestos containing materials in existing buildings poses a threat due to inhalation only if the material is found to be in a friable state. Emissions of asbestos fiber to the ambient air, which can occur during activities such as renovation or demolition of structures made with asbestos containing materials (such as insulation), are regulated in accordance with Section 112 of the Federal Clean Air Act. According to EPA's National Emission Standard for Hazardous Air Pollutants for Asbestos and according to the Sacramento Metropolitan Air Quality Management District (SMAQMD) Rule 902, individual asbestos abatement surveys and appropriate removal and disposal are required for most renovation projects.

Lead Based Materials

Lead is a highly toxic metal that was used for many years in products found in and around homes, including paint and fuels. Although lead-based paints were phased out of production in the early 1970s, exposure to lead from older vintage paint is possible, when the paint is in poor condition, or during paint removal. Workers are exposed to airborne lead during construction, demolition, renovation, and site preparation activities. Children under the age of six are most at risk, the primary sources of lead exposure for most children being deteriorating lead-based paint, lead-contaminated dust, and residential soils containing lead. Lead has been linked to a wide range of health effects, from behavioral problems and learning disabilities, to seizures and death.

The proper handling and disposal of lead based materials can significantly reduce potential safety and health related impacts. The presence of lead based paint and other lead containing building materials in the Planning Area is considered high. Aerially deposited lead, primarily due to vehicle and aircraft emissions, may also be present along major roadways, unpaved areas, and formerly unpaved areas. One major concern for aerially deposited lead within the Planning Area is along US 50, where there are substantial amounts of traffic.

Demolition of structures containing lead-based paint requires specific remediation activities regulated by federal, state, and local laws.

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Radon

Radon isotope-222 is a colorless, odorless, tasteless radioactive gas that is a natural decay product of uranium. Uranium and radon are present in varying amounts in rocks and soil, and radon is present in background concentrations in the atmosphere. Current evidence indicates that increased lung cancer risk is directly related to radon-decay products. Radon potential of rocks and soils and indoor radon exposure levels in the United States are currently areas of intense research by governmental regulators as well as the geoscience and medical communities. At this time, the EPA has recommended an "action" level for indoor radon concentrations at or exceeding 4 pico-curies per liter of air (pCi/l). The EPA has extrapolated a one percent to three percent lung cancer mortality rate due to a lifetime exposure at 4 pCi/l; that is, one to three persons per 100 exposed to this concentration for life will die of lung cancer induced by radon.

The California Statewide Radon Survey Interim Results, based on the EPA/State Department of Health Services State Radon Survey, predicts that only 3.6 percent of homes in Sacramento County would exceed the EPA's recommended level of 4 pCi/l. Of the 33 states participating in the study, California ranks as the third lowest for percentage of homes exceeding 4 pCi/l. Specific indoor radon information is not available as the presence of radon can only be obtained through a sampling and testing program for existing or future buildings. Based on the soil composition and topography of the Planning Area, however, the potential for radon concentrations exceeding 4 pCi/l is estimated to be very low.

Electrical Facilities and Electromagnetic Fields

Pacific Gas and Electric Company and the Sacramento Metropolitan Utility District (SMUD) own and operate the existing electrical facilities within the Planning Area. However, SMUD is the exclusive electrical service provider to the City of Rancho Cordova and will be providing service to the entire Planning Area.

There are several 12-kilovolt (kV) and 69 kV transmission lines throughout the Planning Area, but only two 230 kV lines that pass through the southeastern portion of the Planning Area. The majority of the 230-kV transmission corridor runs diagonally through the Sunrise Douglas Community Plan area. One of the lines is owned and maintained by SMUD, while the other is owned and maintained by PG&E. These transmission lines are located within a 350-foot wide easement corridor. Land use restrictions within this easement include the prohibition against buildings and structures, swimming pools, wells, or other bodies of water, height limitations for lighting and landscaping, and minimum ground to conductor clearances.

Electromagnetic Fields (EMF) are invisible lines of force surrounding any electrical wire or device. They consist of two components — the electric field, which is the result of voltage, and the magnetic field, which is the result of current flow. Ordinary every day use of electricity produces magnetic and electric fields. These 60 Hertz fields (fields that go back and forth 60 times a second) are associated with electrical appliances, power lines, and wiring in buildings. EMF health and safety issues from power lines are preempted by the Public Utilities Commission and therefore typically not addressed in General Plans. Although a point of concern, the evidence that electromagnetic fields from high voltage power lines can be hazardous to human health is not quantifiable and remains unresolved. Federal agencies working on establishing limits and health standards related to EMF include the following: National Institute for Occupational Safety and Health, Environmental Protection Agency, Federal Communications Commission, Occupational Safety and Health Administration, National Telecommunications and Information Administration, and the National Institutes of Health.

PCB Transformers

In 1976, the United States Congress enacted the Toxic Substances Control Act (TSCA), which gave the U.S. EPA the ability to track all industrial chemicals imported into and used in the U.S. The EPA repeatedly screens these chemicals and can require reporting or testing of chemicals that may pose an environmental or human health hazard. The EPA can ban the manufacture and import of those chemicals that pose an unreasonable risk. The TSCA directed the EPA to ban the manufacture of polychlorinated biphenyls (PCBs) and regulated their use and disposal. The EPA accomplished this by the issuance of regulation in 1978. Primary sources of PCBs include fluorescent light ballast and electrical transformers. The Environmental Protection Agency (EPA) maintains the PCB Activity Database (PADS) that identifies generators, transporters, commercial storers, and brokers and disposers of PCBs. Electrical facilities developed after 1979 are unlikely to be associated with PCB-containing transformers. The actual levels of PCBs in specific equipment can only be confirmed by sampling and analysis of the mineral oil coolant within the actual pieces of equipment under consideration. The Planning Area may have transformers with PCBs; however, SMUD is responsible for all transformers within its service area boundaries and is subject to EPA regulations regarding PCB transformers. The Sacramento Metropolitan Utility District is required to notify EPA of any activities or incidences involving PCBs. In addition, SMUD routinely identifies and replaces all leaking transformers and transformers containing PCBs within its service area boundaries.

Buried Natural Gas Pipelines

The Pacific Gas and Electric Company (PG&E) provides natural gas service to the City of Rancho Cordova and will provide service to the entire Planning Area. PG&E owns and operates an 8-inch feeder line natural gas main that is located in the frontage of Sunrise Boulevard and runs throughout the Planning Area. This feeder main is currently operating at 60 pounds per square inch (psi); however, this line is intended to be a future high pressure main to serve the projected growth in the southeastern portion of the Planning Area. There have been no reported leaks, ruptures, or other problems associated with the existing feeder line and this section of buried pipeline has not been identified on any of the regulatory agency database searches as a source of contamination, hazardous materials release, or accident site. PG&E has indicated that extensive system modifications, improvements, and upgrades will be required to serve the estimated demand from development associated with the General Plan. New natural gas facilities are generally located in previously disturbed rights-of-way; therefore, no additional environmental effects are expected beyond specific site development improvements. For further information regarding natural gas facilities, the reader is referred to Section 4.12, Utilities and Public Services.

Airport Operations Hazards

Mather Airport is a full-service Fixed Base Operator (FBO) with a 24-hour air traffic control and one of the longest runways in California, at 11,300 feet long. Additionally, over 200 acres of land are available for new construction at Mather Airport. Airport-related hazards are generally associated with aircraft accidents, particularly during takeoffs and landings. Airport operation hazards include: incompatible land uses, power transmission lines, wildlife hazards (e.g., bird strikes), and tall structures that penetrate the imaginary surfaces surrounding an airport. The term "imaginary surfaces", established by Federal Aviation Administration regulations (14 Code Fed. Regs., part 77) refers to heights above which any object or structure is considered by the FAA to constitute a hazard to aircraft navigation, and thus a hazard to both aircraft and people and structures on the ground. Portions of the Planning Area, specifically the Downtown Planning Area, require mandated height restrictions as they lie within the imaginary surfaces of Mather

4.4 HAZARDS AND HUMAN HEALTH

Airport. The reader is referred to Section 4.1, Land Use, for further discussion on height restrictions within the Planning Area, including the Downtown Planning Area.

Natural Hazards

For a discussion on flood hazards, the reader is referred to Section 4.8, Hydrology and Water Quality. For a discussion on fire hazards, the reader is referred to Section 4.12, Utilities and Public Services.

4.4.2 REGULATORY FRAMEWORK

Although numerous federal, state, and local laws and regulations pertaining to hazardous waste management are applicable to remedial activities, conformance with these laws and regulations is addressed through separate environmental review and regulatory oversight specifically associated with the remedial projects. These activities are separate actions that are not part of the proposed Rancho Cordova General Plan. Federal, state, and local laws and regulations that would apply to construction and operational activities within the Planning Area are included in **Table 4.4-1** and discussed further below.

**TABLE 4.4-1
REGULATORY AGENCIES FOR HAZARDOUS MATERIALS**

Federal Agencies	
Regulatory Agency	Authority
Department of Transportation (DOT)	Hazardous Materials Transportation Act - Code of Federal Regulations (CFR) 49
Environmental Protection Agency (EPA)	Federal Water Pollution Control Act Clean Air Act Resource Conservation and Recovery Act (RCRA) Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Superfund Amendments and Reauthorization Act (SARA) Federal Insecticide, Fungicide and Rodenticide Act Toxic Substances Control Act (TSCA)
National Institute of Health	Guidelines for Carcinogens and Biohazards
Occupational Safety and Health Administration (OSHA)	Occupational Safety and Health Act and CFR 29
State Agencies	
Regulatory Agency	Authority
Department of Toxic Substances Control (DTSC)	California Code of Regulations
Department of Industrial Relations (CAL-OSHA)	California Occupational Safety and Health Act, CCR Title 8
State Water Resources Control Board and Regional Water Quality Control Board	Porter-Cologne Water Quality Act Underground Storage Tank Law
Health and Welfare Agency	Safe Drinking Water and Toxic Enforcement Act
Air Resources Board and Air Pollution Control District	Air Resources Act
Office of Emergency Services	Hazardous Materials Release Response Plans/Inventory Law

Federal Agencies	
Department of Fish and Game	Fish and Game Code
Department of Food and Agriculture	Food and Agriculture Code
State Fire Marshall	Uniform Fire Code, CR Title 19
County Agencies	
Regulatory Agency	Authority
Sacramento County Environmental Management Department	CCR Title 22 Hazardous Waste Control Law Hazardous Materials Release Response Plans/Inventory Law Acutely Hazardous Materials Law Underground Storage Tanks Law

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

Hazardous Materials Handling

At the federal level, the principal agency regulating the generation, transport, and disposal of hazardous substances is EPA, under the authority of the Resource Conservation and Recovery Act (RCRA). The RCRA established an all-encompassing federal regulatory program for hazardous substances that is administered by EPA. Under the RCRA, EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances. The RCRA was amended in 1984 by the Hazardous and Solid Waste Amendments of 1984 (HSWA), which specifically prohibits the use of certain techniques for the disposal of various hazardous substances. The Federal Emergency Planning and Community Right to Know Act of 1986 imposes hazardous materials planning requirements to help protect local communities in the event of accidental release. The EPA has delegated much of the RCRA requirements to the DTSC.

Hazardous Materials Releases

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980 (U.S. Code, Title 42). This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, \$1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified. The law authorizes two kinds of response actions: 1) short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response; and 2) long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on EPA's National Priorities List (NPL). CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants.

4.4 HAZARDS AND HUMAN HEALTH

CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

CERCLA created the Superfund Program in order to clean up uncontrolled or abandoned hazardous-waste sites and to respond to accidents, spills, and other emergency releases of pollutants and contaminants. Section 101 of CERCLA defines a list of hazardous chemicals for which the U.S. EPA must establish regulations. Releases of CERCLA hazardous substances in amounts greater than their "reportable quantity" must be reported to the National Response Center and to state and local government officials. Hazardous substances identified in CERCLA include all chemicals on the following regulatory lists: Clean Air Act list of hazardous air pollutants (HAPs); Clean Water Act list of hazardous substances and priority pollutants; Solid Waste Disposal Act list of hazardous wastes; and Toxic Substances Control Act list of imminent hazards.

Worker Safety Requirements

The U.S. Department of Labor Occupational Safety & Health Administration (OSHA) is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

Federal Aviation Regulations

The Code of Federal Regulations, Title 14, Volume 2 revised as of January 1, 2004 (14CFR77.1) pertains to aeronautics and space. Chapter 1 specifically includes the Federal Aviation Administration regulations and Part 77 (Federal Aviation Regulation or FAR Part 77) pertains to objects affecting navigable airspace. FAR Part 77 establishes standards for determining obstructions in navigable airspace; sets forth the requirements for notice to the Administrator of certain proposed construction or alteration; provides for aeronautical studies of obstructions to air navigation in order to determine their effect on the safe and efficient use of airspace; provides for public hearings on the hazardous effects of proposed construction or alteration on air navigation; and provides for the establishment of antenna farm areas.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Hazardous Materials Handling

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires preparation of Hazardous Materials Business Plans and disclosure of hazardous materials inventories. A Business Plan includes an inventory of hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the state. Local agencies, including the Sacramento County Department of Environmental Management and the City of Rancho Cordova, administer these laws and regulations.

Worker Safety Requirements

The California Occupational Safety and Health Administration (Cal-OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations within California. Cal-OSHA regulations pertaining to the use of hazardous materials in the workplace, as detailed in CCR Title 8, include requirements for safety training, availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal-OSHA enforces hazard communication program regulations that contain training and information requirements, including procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees at hazardous waste sites. The hazard communication program requires that Material Safety Data Sheets (MSDS) be available to employees and that employee information and training programs be documented.

Emergency Response to Hazardous Materials Incidents

California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government and private agencies. Response to hazardous materials incidents is one part of this plan. The plan is managed by the State Office of Emergency Services (OES), which coordinates the responses of other agencies including the Cal-EPA, the California Highway Patrol (CHP), California Department of Fish and Game, Central Valley RWQCB, Sacramento County Sheriff's Department, and the City of Rancho Cordova Police and Fire Departments.

Hazardous Materials Transport

The U.S. Department of Transportation regulates hazardous materials transportation between states. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads.

It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery, or the loading, of such materials (Cal. Vehicle Code §§ 31602(b), 32104(a)). When transporting explosives through or into a city for which a route has not been designated by the Highway Patrol, drivers must follow routes as may be prescribed or established by local authorities (California Vehicle Code, Section 31614(a)). The transportation of explosives in quantities of 1,000 pounds or less, or other than on a public highway, is subject to the California Health and Safety Code (California Vehicle Code, Section 31601(a)).

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND LAWS

Regulatory Authority for Remedial Activities at the IRCTS and Excluded Area

Under the 1994 ISEO issued to Aerojet and MDC, the DTSC and Central Valley RWQCB have regulatory authority over studies to determine the character and extent of chemicals that are found to originate in soil and groundwater beneath the IRCTS. Under the 1997 CAO (revised 2000), the Central Valley RWQCB has regulatory authority over the occurrence of perchlorate beneath the IRCTS and on the off-site migration of perchlorate. In addition, the EPA, DTSC, and Central Valley RWQCB have regulatory authority over chemicals that originate from the Aerojet

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NPL Site and have migrated into groundwater beneath the IRCTS. Other agencies with regulatory authority include the Sacramento Metropolitan Air Quality Management District for emissions into the atmosphere and the Sacramento County Environmental Management Department for well construction permits and hazardous materials plans.

In 1991, DTSC issued an Imminent and Substantial Endangerment and Remedial Action Order to Aerojet and MDC that required them to perform activities necessary to investigate and remediate contamination present in soil and groundwater beneath the IRCTS. The 1991 order was replaced in 1994 by DTSC's issuance of an Imminent and Substantial Determination and Consent Order. The 1994 order clarified the regulatory requirements for the RI/FS process and remediation of contaminants in soil, soil vapor, or groundwater at the IRCTS.

The regulatory framework for contaminant studies within the IRCTS is structured from the following three documents:

- June 1989 PCD, which directs the EPA, DTSC, and Central Valley RWQCB, and Aerojet on issues related to contaminants in groundwater from the Aerojet NPL Site that have migrated beneath the IRCTS;
- June 1994 ISEO, which directs the DTSC, Aerojet, and MDC on issues related to contaminants in soil, soil vapor, and groundwater beneath the IRCTS; and
- June 1997 (revised September 2000) CAO, which directs the Central Valley RWQCB, Aerojet, and MDC on issues related to perchlorate in groundwater beneath the IRCTS and the off.-site migration of perchlorate.

The first document obligates Aerojet to perform studies and collect data sufficient for EPA, DTSC and Central Valley RWQCB to verify the character and extent of contaminants in groundwater from the Aerojet NPL Site. The next two documents obligate Aerojet and MDC to complete activities required to reduce the concentration of contaminants to levels that DTSC and Central Valley RWQCB find to be protective of human health and the environment. The PCD and the ISEO include community participation guidelines and both documents are available for public review at the DTSC office, located at 8800 Cal Center Drive in Sacramento, California. The CAO is available for public review at the Central Valley RWQCB office, located at 11020 Sun Center Drive, Suite 200, Rancho Cordova, California.

Sacramento County

The County of Sacramento, Office of Emergency Services (OES) implements the State's Right-to-Know Ordinance that gives the OES the authority to inventory hazardous materials used by businesses. The County is also in the process of collecting information regarding existing and proposed locations of hazardous material disposal, storage, handling, and transportation facilities. Additionally, the Sacramento County Environmental Management Department (EMD) is responsible for enforcing the state regulations on both the city and county level, governing hazardous waste generators, hazardous waste storage, underground storage tanks (including inspections, enforcement, and removals), and environmental health (including inspections and enforcement). EMD also regulates the use, storage, and disposal of hazardous materials in the County and abandonment of wells and septic systems in the County by issuing permits, monitoring regulatory compliance, investigating complaints, and other activities. EMD reviews technical aspects of hazardous waste site cleanups, and oversees remediation of certain contaminated sites resulting from leaking underground storage tanks. EMD is also responsible for providing technical assistance to public and private entities that seek to minimize the generation of hazardous waste.

Sacramento County Area Plan

The Sacramento County Environmental Management Department established the Sacramento County Area Plan (SCAP) as a guideline for hazardous material related accidents or occurrences. The purpose of the SCAP is "to delineate responsibilities and actions by various agencies in Sacramento County required to meet the obligation to protect the health and welfare of the populace, natural resources (environment), and the public and private properties involving hazardous materials." The SCAP is used for making initial decisions at a hazardous materials incident. The SCAP uses Level I, Level II and Level III classifications for hazardous material incidents, which are determined by the following planning basis:

- Level of technical expertise required to abate the incident;
- Extent of Municipal, County, and State Government involved;
- Extent of evacuation of civilians; and
- Extent of injuries and/or deaths.

Sacramento County Multi-Hazard Disaster Plan

The Sacramento County Multi-Hazard Disaster Plan (SCMDP) was established to address a planned response to extraordinary emergency situations associated with natural disasters and technological incidents. The SCMDP focuses on operational concepts related to large-scale disasters, which can pose major threats to life and property requiring unusual emergency responses. The SCMDP was designed to include Sacramento County as part of the California Standardized Emergency Management System (SEMS), which assigns responsibilities to support implementation of the SCMDP and to ensure successful response during a major disaster.

Sacramento County General Plan

The County of Sacramento General Plan was adopted by the County Board of Supervisors in December 1993 and is currently undergoing an update. The County General Plan policies and implementation measures apply to development within the Rancho Cordova General Plan Planning Area that are outside of the City limits, until such time those areas are annexed into the City of Rancho Cordova. The Hazardous Materials Element and Safety Element within the County General Plan include policies and implementation measures relevant to hazardous material and human safety related impacts within Sacramento County. General Plan Policies and associated implementation measures that are of particular note include: Policies HM-4 and HM-11 pertaining to the transportation of hazardous materials and protection of residents; Policy HM-6 pertaining to the acquisition of additional information so that federal and state agencies can better establish legally enforceable standards for hazardous materials; Policy HM-7 ensuring residents adjacent to industrial or commercial facilities are protected from the mishandling of hazardous materials; Policy HM-8 pertaining to the minimization of impacts due to groundwater and soil contamination; Policy HM-9 pertaining to the prevention of surface water contamination; Policy HM-10 pertaining to effective pollution prevention strategies; and Policy HM-12 pertaining to the inventory and reduction of toxic air contaminants.

Mather Airport Comprehensive Land Use Policy (CLUP)/ Airport Land Use Compatibility Plan (ALUP)

The Sacramento County Board of Supervisors adopted the updated Mather Airport Comprehensive Land Use Plan (CLUP) and the Mather Airport Policy Area (MAPA) into the County's General Plan. The CLUP establishes the planning area boundaries of the airport and provides the land use guidelines on which compatible uses are determined. The MAPA policies

4.4 HAZARDS AND HUMAN HEALTH

place additional development conditions on new residential uses within the geographic boundaries of the MAPA. The MAPA policies are more stringent than the CLUP policies and provide additional protection to the airport and the surrounding land uses. The CLUP is being updated and renamed the Mather Airport Land Use Compatibility Plan (ALUP). The Mather Airport Master Plan is being updated concurrently with the CLUP. The reader is referred to Section 4.1 (Land Use) for a further discussion regarding applicable plans for Mather Airport.

4.4.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Based on criteria derived from Appendix G in the CEQA Guidelines, the proposed General Plan would result in a significant impact to the environment or to human health and safety if the project would:

- 1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- 3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- 4) Be located on a site that is included on a list of hazardous materials sites compiled by Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.
- 5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area.
- 6) For a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.
- 7) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

METHODOLOGY

This section analyzes the impacts associated with the proposed General Plan, including the risk of upset due to potential hazardous substances, such as hazardous materials and/or hazardous waste within the Planning Area, and other hazards to public safety. This evaluation of the General Plan's potential to create hazards to the public health or the environment related to hazardous substances is based on database research, field reconnaissance of the surroundings, review of the Sacramento County General Plan, Rancho Cordova Zoning Code, consultation with relevant agencies, and review of public comment letters.

PROJECT IMPACTS AND MITIGATION MEASURES

Transportation of Hazardous Materials

Impact 4.4.1 Implementation of the General Plan would include the routine transportation of hazardous materials on Planning Area roadways. Implementation of proposed General Plan policies and action items would result in a **less than significant** impact.

Though the specifics of hazardous materials cannot be predicted, according to the California Highway Patrol (CHP), US 50 and State Route 16 (Jackson Road) are the only approved transportation routes in the Planning Area for the transportation of explosives. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery, or the loading of such materials (California Vehicle Code §§ 31602(b), 32104(a)). The California Highway Patrol also designates through routes to be used for the transportation of inhalation hazards and may designate separate through routes for the transportation of inhalation hazards composed of any chemical rocket propellant (California Vehicle Code, Section 32100 and Section 32102(b)). US 50 east to Prairie City Road is the only approved transportation route in the Planning Area for the transportation of poisonous inhalation hazards. These materials are highly toxic, spread rapidly, and require rapid and widespread evacuation if there is loss of containment or a fire. These inhalation hazards and poisonous gases are subject to additional safeguards. There are no approved transportation routes within the Planning Area for the transportation of radioactive materials. However, Highway 80, located over 5 miles northwest of the Planning Area, has been approved for the transportation of radioactive materials, as well as explosives and poisonous inhalation hazards (CHP, pers. comm., 2006).

As the proposed General Plan does not call for substantial expansion of industrial uses in the area that would appreciably increase the transportation of hazardous materials, and as approved transportation routes within the Planning Area are limited, there would be minimal routine transport of hazardous materials on Planning Area roadways. As previously noted, transportation of hazardous materials is regulated by the CHP, Caltrans, U.S. Department of Transportation (Hazardous Materials Transportation Act) and other regulatory agencies (which includes provisions regarding securing materials and container design) that provide standards designed to avoid releases.

Proposed General Plan Policies and Action Items That Provide Mitigation

The following proposed General Plan policies and action items address the use and handling of hazardous materials and associated land uses involving hazardous materials:

Policy S.1.1 - Maintain acceptable levels of risk of injury, death, and property damage resulting from reasonably foreseeable safety hazards in Rancho Cordova.

Action S.1.1.1 – Conduct an evaluation, as part of the CEQA process, of the potential safety hazards of proposed development within the City and mitigate impacts as appropriate and practical to ensure a reasonable level of safety for residents, workers, and property owners.

Policy S.5.4 Ensure that all industrial facilities are constructed, maintained, and operated in accordance with current safety and environmental protection standards.

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- Action S.5.4.1 Support the continued enforcement of permitting requirements for radioactive materials.
- Action S.5.4.2 Enforce public safety standards for the use of radioactive materials, including the placarding of transport vehicles.
- Policy S.5.5 Separate hazardous or toxic materials from the public.
- Action S.5.5.1 Require industries which store and process hazardous or toxic materials to provide a buffer zone between the materials and the property boundaries; the buffer zone must be sufficient to protect public safety, as determined by the Planning Department.
- Action S.5.5.2 Consider the impact of proposed industrial development projects with respect to transport of hazardous materials within the city. Locate uses requiring substantial transport of hazardous materials to direct such traffic away from the city's residential and commercial areas.
- Policy S.5.6 Ensure that procedures are in place to reduce the chance of accidents in the transport of hazardous materials.
- Action S.5.6.1 Continue to coordinate with the State Office of Emergency Services, the State Department of Toxic Substances Control, the State Highway Patrol, County of Sacramento, the Sacramento Metropolitan Fire District, the Rancho Cordova Police Department, and other appropriate agencies in hazardous materials route planning and incident response.
- Action S.5.6.2 Request that state and federal agencies that regulate the transportation of hazardous materials review regulations and procedures, in cooperation with the City, to determine means of mitigating the public safety hazard in urbanized areas.

Implementation of the Rancho Cordova General Plan policies and associated action items described above, as well as adherence to all federal, state, and local regulations regarding the transportation of hazardous materials, would reduce the environmental impacts associated with the routine transportation of hazardous materials on Planning Area roadways to **less than significant**.

Mitigation Measures

None required.

Release and Exposure to Hazardous Materials

Impact 4.4.2 The Planning Area consists of land uses having the potential to result in an increased risk of release of hazardous materials. This is considered a **potentially significant** impact.

Implementation of the General Plan with the proposed residential and non-residential uses would involve the storage, use, and transport of hazardous materials (e.g., jet fuel at Mather Airport, gasoline fuels, demolition materials, asphalt, lubricants, toxic solvents, pesticides and herbicides) during construction, demolition, and landscaping activities. In addition, certain commercial uses, including water treatment plants, swimming pool facilities, gas stations, and

dry cleaners that store, use, and routinely transport hazardous material to and from their facilities could pose a potential hazard to the environment. Hazardous materials used during construction and operational activities throughout the Planning Area may expose nearby residents and local schools to toxic emissions. Electrical transformers and industrial products containing polychlorinated biphenyls (PCBs) and heavy metals, as well as persistent residual chemicals including pesticides, herbicides, and fertilizers have the potential to pose a health and safety risk via accidental release, misuse or historic use in the Planning Area.

As discussed under Impact 4.4.1, the transportation of hazardous materials on area roadways is regulated by the CHP, U.S. Department of Transportation (Hazardous Materials Transportation Act) and Caltrans, and use of these materials is regulated by the DTSC (22 Cal. Code Regs §§ 66001, et seq.). The use, storage, and transport of hazardous materials by developers, contractors, business owners, and others are required to be in compliance with local, state, and federal regulations during project construction and operation. Facilities that use hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. All existing and future projects in the General Plan Planning Area would be required to comply with federal, state and local regulations regarding the handling, transportation, disposal, and clean-up of hazardous materials. For further discussion on impacts to air quality due to toxic emissions, the reader is referred to Section 4.6, Air Quality, of this EIR.

As discussed above in the Regulatory Section (Section 4.4.2), under the 1994 ISEO issued to Aerojet and MDC, the Department of Toxic Substances Control (DTSC) and the Central Valley RWQCB have regulatory authority over studies to determine the character and extent of chemicals that are found to originate in soil and groundwater beneath the contaminated properties. Under the 1997 CAO (revised 2000), the Central Valley RWQCB has regulatory authority over the occurrence of perchlorate beneath the IRCTS and on the off-site migration of perchlorate. In addition, the EPA, DTSC, and Central Valley RWQCB have regulatory authority over chemicals that originate from the Aerojet NPL Site which have migrated into groundwater beneath the IRCTS. Remediation activities have commenced in these areas.

Underground storage tanks (USTs) are associated with a wide variety of farmland and ranching activities. Various portions of the Planning Area have been historically used for rural residential and cattle grazing. However, USTs used in farming and ranching activities are exempt from the Sacramento County Environmental Management Department's (EMD) registration requirements. Due to unknown underlying conditions, there is the potential for discovering USTs within the General Plan Planning Area. If UST(s) are discovered during any phase of a project, removal is required prior to additional site preparation or development activities (California State Water Resources Control Board Underground Storage Tank Program, <http://www.swrcb.ca.gov/cwphome/ust/> and California Health and Safety Code §§ 25281, et seq). Although the Environmental Management Department does not regulate the registration of farm/ranch USTs, all UST removal and remediation efforts must comply with the Sacramento County EMD standards. If discovered, the tanks would require removal prior to any development activities. If subsurface contamination occurred as a result of tank leakage or overfilling, the contamination would require assessment and remediation in compliance with Sacramento County EMD regulations.

To site and construct a state-funded school, a public school district must complete an extensive and independent statutory review process in accordance with the siting requirements of the California Department of Education. In addition to CEQA review, and in order to ensure that each new school site is safe from toxic hazards, new school sites may be subject to review from the following agencies: the Department of Toxic Substances Control; the State Allocation Board,

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which administers and allocates funding requests; and the Division of the State Architect, which reviews the design, plans, and construction of public-funded schools. These review processes are most typically done on a site-specific basis. The selection of new public school sites must comply with the California Education Code (including Section 17521, requiring the governing board of the school district to adopt a resolution in connection with consideration of proposal for occupancy of a building to be constructed on its property, and to conduct a public meeting), and the California Code of Regulations (CCR), Title 5, Sections 14001 through 14012, which outlines the powers and duties and establishes standards with which the California Department of Education, and all public school districts, must comply with in the selection of new school sites. Due to the fact that any future siting of schools within the Planning Area will have to comply with state statutory and regulatory requirements addressing public and environmental health as well as safety from hazards, including hazardous substances, impacts from siting schools in the vicinity of such hazards are not evaluated further in this document. However, impacts due to the siting of schools and hazards within the Planning Area are not anticipated to be significant. At this time, any further analysis of this impact would be speculative.

Proposed General Plan Policies and Action Items That Provide Mitigation

The following proposed General Plan policies and action items address issues associated with hazardous materials and contamination:

- Policy LU.1.4 Promote high quality, efficient, and cohesive land utilization that minimizes negative impacts (e.g., traffic congestion and visual blight) and environmental hazards (e.g. flood, soil instability) on adjacent neighborhoods and infrastructure and preserve existing and future residential neighborhoods from encroachment of incompatible activities and land uses.*
- Action LU.1.4.3 Require the disclosure of potential land use compatibility issues in all parts of the City, such as noise, dust, odors, etc., in order to provide potential purchasers with the information necessary to make informed decisions about the property and its future land uses.*
- Action LU.1.4.4 Develop guidelines for the buffering of incompatible land uses in ways that retain community character but do not consume large land area, create pedestrian barriers, or result in unsafe conditions.*
- Policy NR.8.1 Support recycling efforts by developing a set of programs to educate residents on recycling and provide recycling services.*
- Action NR.8.1.6 Provide locations for household hazardous wastes to be recycled.*
- Policy S.1.1 - Maintain acceptable levels of risk of injury, death, and property damage resulting from reasonably foreseeable safety hazards in Rancho Cordova.*
- Action S.1.1.1 – Conduct an evaluation, as part of the CEQA process, of the potential safety hazards of proposed development within the City and mitigate impacts as appropriate and practical to ensure a reasonable level of safety for residents, workers, and property owners.*
- Policy S.1.3 – Prepare for emergencies and disasters prior to their occurrence.*

- Action S.1.3.1 – Create, adopt, and update, as needed a local Emergency Management Plan identifying leadership, representatives, coordination, and action for responding to emergencies in a timely and efficient manner.*
- Goal S.5 Reduce the possibility of serious harm to residents, employees, or the environment as the result of an accidental release of toxic or hazardous substances.*
- Policy S.5.1 Work with public agencies and private companies to identify and work towards elimination of potential hazardous releases through compliance with State and Federal law.*
- Policy S.5.2 Consider the potential impact of hazardous facilities on the public and/or adjacent or nearby properties posed by reasonably foreseeable events. The City considers an event to be “reasonably foreseeable” when the probability of the event occurring is greater than one in one million (1 x 10⁻⁶) per year.*
- Action S.5.2.1 Adopt, and update as necessary, local standards for maximum acceptable exposure for the evaluation of hazardous facilities for potential to create hazardous physical effects at offsite locations that could result in death, significant injury, or significant property damage.*
- Policy S.5.1 The City shall work with public agencies and private companies to identify and work towards elimination of potential hazardous releases through compliance with State and Federal laws.*
- Policy S.5.3 Regulate the storage of hazardous materials and waste consistent with State and Federal law.*
- Action S.5.3.1 Regularly review the City's codes to ensure that City regulations reflect the most up-to-date standards for the storage, handling, and use of hazardous and toxic materials.*
- Action S.5.3.2 During the review and approval process for development plans and building permits, ensure that secondary containment is provided for hazardous and toxic materials.*
- Action S.5.3.3 Require all sites that are suspected or known to contain hazardous materials and/or are identified in a hazardous material/waste search to be reviewed, tested, and remediated for potential hazardous materials in accordance with all local, state, and federal regulations.*
- Policy S.5.4 The City shall seek to ensure that all industrial facilities are constructed, maintained, and operated in accordance with current safety and environmental protection standards.*
- Action S.5.4.1 Support the continued enforcement of permitting requirements for radioactive materials.*
- Action S.5.4.2 Enforce public safety standards for the use of radioactive materials, including the placarding of transport vehicles.*

4.4 HAZARDS AND HUMAN HEALTH

- Policy S.5.5* *Separate hazardous or toxic materials from the public.*
- Action S.5.5.1* *Require industries which store and process hazardous or toxic materials to provide a buffer zone between the materials and the property boundaries; the buffer zone must be sufficient to protect public safety, as determined by the Planning Department.*
- Action S.5.5.2* *Consider the impact of proposed industrial development projects with respect to transport of hazardous materials within the city. Locate uses requiring substantial transport of hazardous materials to direct such traffic away from the city's residential and commercial areas.*

Mitigation Measures

MM 4.4.2 The following shall be added as a policy to the Safety Element under Goal SA.1:

The City shall require written confirmation from applicable local, regional, state, and federal agencies that known contaminated sites have been deemed remediated to a level appropriate for land uses proposed prior to the City approving site development or provide an approved remediation plan that demonstrates how contamination will be remediated prior to site occupancy. This documentation will specify the extent of development allowed on the remediated site as well as any special conditions and/or restrictions on future land uses.

Implementation of the above proposed General Plan policies and associated action items, Mitigation Measure MM 4.4.2 and adherence to all federal, state, and local regulations regarding the storage and handling of hazardous wastes, the use and removal of underground storage tanks, as well as the clean-up and remediation of leaking contaminants and hazardous wastes and hazardous substances, would reduce potential impacts to the environment and to public health and safety associated with the accidental release of and exposure to hazardous substances to **less than significant**.

Airport Safety Hazards

Impact 4.4.3 Implementation of the proposed General Plan would locate development within an airport land use plan, potentially resulting in a safety hazard for people residing or working in the area. This impact is considered **less than significant**.

As described in the Airport Operations Hazards section above, airport operation hazards are generally associated with aircraft accidents, particularly during takeoffs and landings due to incompatible land uses, power transmission lines, wildlife hazards (e.g., bird strikes), and tall structures that penetrate the imaginary surfaces surrounding an airport.

The Comprehensive Land Use Plan (CLUP) establishes the planning area boundaries of Mather Airport and provides the land use guidelines on which compatible uses are determined. The Mather Airport Planning Area (MAPA) policies place additional development conditions on new residential uses within the geographic boundaries of the MAPA. The MAPA policies are more stringent than the CLUP policies and provide additional protection to the airport and surrounding land uses. Federal Aviation Regulations, which involve the Caltrans Division of Aeronautics, mandate height restrictions for buildings within imaginary surfaces surrounding airports (FAR, Part

77). Buildings within the Mather Airport safety zone would be required to adhere to both Federal Aviation Administration regulations, as well as the local CLUP. The reader is referred to Section 4.1, Land Use, for additional discussion regarding Mather Airport and the CLUP.

Proposed General Plan Policies and Action Items That Provide Mitigation

The following proposed General Plan provisions address potential operational and safety conflicts with Mather Airport operations:

Policy LU.3.3 Coordinate with regional planning agencies to set land use and environmental policies and cooperate in the implementation of programs consistent with General Plan policy.

Policy LU.3.5 Consult with state and federal regulatory and resource agencies during initial review of development projects to identify potential environmental conflicts and establish, if appropriate, concurrent application processing schedules.

Adherence to Federal regulations, Comprehensive Land Use Plan, Mather Airport Planning Area provisions, implementation of the General Plan Land Use policies described above and Mitigation Measure MM 4.1.3b (see Section 4.1 [Land Use]), would reduce safety hazards due to the location of Mather Airport to **less than significant**.

Mitigation Measures

None required.

Interfere With Emergency Response Plans

Impact 4.4.4 Implementation of the proposed General Plan could impair implementation of or physically interfere with the Sacramento County Multi-Hazard Disaster Plan (SCMDP). This is considered a **less than significant** impact.

An efficient roadway and circulation system is vital for the evacuation of residents and the mobility of fire suppression, emergency response, and law enforcement vehicles. Implementation of the General Plan will add additional traffic and residences requiring evacuation in case of an emergency. However, as described in Section 4.5, Transportation and Circulation, compared to existing conditions, implementation of the proposed roadway system under the General Plan would provide for multiple roadway connections that offer more escape route and emergency access options, as well as new north-south and east-west evacuation/emergency routes throughout the Planning Area. The reader is referred to Impact 4.5.3 in Section 4.5, Transportation and Circulation, for additional discussion. As implementation of the proposed roadway system within the General Plan would improve city roadway connectivity, allowing for better emergency vehicle access to residences as well as evacuation routes for area residents, this impact is considered **less than significant**.

Mitigation Measures

None required.

4.4 HAZARDS AND HUMAN HEALTH

4.4.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

SETTING

The cumulative setting for hazards and human health risks associated with the General Plan includes the City of Rancho Cordova as well as the unincorporated portions of the Planning Area. Hazardous material, human health, and safety impacts as described in CEQA Appendix G are generally site-specific and not cumulative by nature. The potential cumulative impacts due to the increased use of hazardous materials resulting from proposed development under the General Plan include, but are not limited to: air quality, noise, water quality, flooding, fire, as well as exposure to multiple contaminants. The cumulative impacts associated with affected resources, such as air and water, are analyzed in the applicable technical sections of this EIR.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Hazards and Health Risks

Impact 4.4.5 Persons could be exposed to contaminated soil or groundwater during development of previously contaminated sites or sites undergoing remediation. Implementation of the General Plan policies and action items as well as existing regulatory requirements and standards would reduce impacts so that they are considered **less than cumulatively considerable**.

The cumulative effects from land uses proposed in association with the General Plan could create a risk to public health from exposure to hazards and hazardous materials from existing contamination conditions as well as future land use operations (transportation, handling and storage). As discussed under Impact 4.4.2, implementation of the General Plan would involve the development of land on previously contaminated sites. Contamination from hazardous waste sites and leaking underground storage tanks have the potential to contaminate soils and/or groundwater and present public health hazards.

Transportation of hazardous materials on area roadways is regulated by the CHP, U.S. Department of Transportation (Hazardous Materials Transportation Act) and Caltrans, and use of these materials is regulated by the DTSC (22 Cal. Code Regs §§ 66001, et seq.). The use, storage, and transport of hazardous materials by developers, contractors, business owners, and others are required to be in compliance with local, state, and federal regulations during project construction and operation. New school sites may also be subject to review from the following agencies: the Department of Toxic Substances Control; the State Allocation Board, which administers and allocates funding requests; and the Division of the State Architect, which reviews the design, plans, and construction of public-funded schools. These review processes are most typically done on a site-specific basis. The selection of new public school sites must comply with the California Education Code (including Section 17521, requiring the governing board of the school district to adopt a resolution in connection with consideration of proposal for occupancy of a building to be constructed on its property, and to conduct a public meeting), and the California Code of Regulations (CCR), Title 5, Sections 14001 through 14012, which outlines the powers and duties and establishes standards with which the California Department of Education, and all public school districts, must comply with in the selection of new school sites.

Proposed General Plan Policies and Action Items That Provide Mitigation

The following proposed General Plan policies and action items address land uses and activities associated with hazardous materials and contamination:

- Policy LU.1.4 *Promote high quality, efficient, and cohesive land utilization that minimizes negative impacts (e.g., traffic congestion and visual blight) and environmental hazards (e.g. flood, soil instability) on adjacent neighborhoods and infrastructure and preserve existing and future residential neighborhoods from encroachment of incompatible activities and land uses.*
- Action LU.1.4.3 *Require the disclosure of potential land use compatibility issues in all parts of the City, such as noise, dust, odors, etc., in order to provide potential purchasers with the information necessary to make informed decisions about the property and its future land uses.*
- Action LU.1.4.4 *Develop guidelines for the buffering of incompatible land uses in ways that retain community character but do not consume large land area, create pedestrian barriers, or result in unsafe conditions.*
- Policy NR.8.1 *Support recycling efforts by developing a set of programs to educate residents on recycling and provide recycling services.*
- Action NR.8.1.6 *Provide locations for household hazardous wastes to be recycled.*
- Policy S.1.1 *Maintain acceptable levels of risk of injury, death, and property damage resulting from reasonably foreseeable safety hazards in Rancho Cordova.*
- Action S.1.1.1 *Conduct an evaluation, as part of the CEQA process, of the potential safety hazards of proposed development within the City and mitigate impacts as appropriate and practical to ensure a reasonable level of safety for residents, workers, and property owners.*
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4.4 HAZARDS AND HUMAN HEALTH

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- Action S.5.3.1* *Regularly review the City's codes to ensure that City regulations reflect the most up-to-date standards for the storage, handling, and use of hazardous and toxic materials.*
- Action S.5.3.2* *During the review and approval process for development plans and building permits, ensure that secondary containment is provided for hazardous and toxic materials.*
- Action S.5.3.3* *Require all sites that are suspected or known to contain hazardous materials and/or are identified in a hazardous material/waste search to be reviewed, tested, and remediated for potential hazardous materials in accordance with all local, state, and federal regulations.*
- Policy S.5.4* *The City shall seek to ensure that all industrial facilities are constructed, maintained, and operated in accordance with current safety and environmental protection standards.*
- Action S.5.4.1* *Support the continued enforcement of permitting requirements for radioactive materials.*
- Action S.5.4.2* *Enforce public safety standards for the use of radioactive materials, including the placarding of transport vehicles.*
- Policy S.5.5* *Separate hazardous or toxic materials from the public.*
- Action S.5.5.1* *Require industries which store and process hazardous or toxic materials to provide a buffer zone between the materials and the property boundaries; the buffer zone must be sufficient to protect public safety, as determined by the Planning Department.*
- Action S.5.5.2* *Consider the impact of proposed industrial development projects with respect to transport of hazardous materials within the city. Locate uses requiring substantial transport of hazardous materials to direct such traffic away from the city's residential and commercial areas.*

Implementation of the above proposed General Plan policies and associated action items, Mitigation Measure MM 4.4.2 and compliance with federal, state and local regulations regarding the handling, transportation, disposal, and clean-up of hazardous materials would fully mitigate specific hazardous material exposure issues associated with the proposed General Plan. As such, the General Plan's contribution to cumulative hazardous material impacts and other hazards to public safety are considered **less than cumulatively considerable**.

Mitigation Measures

None required.

REFERENCES

- Agency For Toxic Substances and Disease Registry, <http://www.atsdr.cdc.gov/>
- California Code of Regulations, Title 13, Chapter 6, Articles 1 and 2, <http://government.westlaw.com/linkedslice/default.asp?SP=CCR-1000>
- California Department of Education School Site Selection, <http://www.cde.ca.gov/ls/fa/sf/schoolsiteguide.asp>
- California Department of Toxic Substances Control, <http://www.dtsc.ca.gov/>
- California Geological Survey, http://www.consrv.ca.gov/cgs/geologic_hazards/hazardous_minerals/index.htm
- California State Water Resources Control Board Geotracker website, <http://geotracker.swrcb.ca.gov/>
- California State Water Resources Control Board Underground Storage Tank Program, <http://www.swrcb.ca.gov/cwphome/ust/>
- County of Sacramento. CEQA Findings of Fact and Statement of Overriding Considerations of the Board of Supervisors of Sacramento County for the Sunrise Douglas Community Plan/Sunridge Specific Plan. July 17, 2002.
- County of Sacramento Department of Environmental Review and Assessment. Sunrise Douglas Community Plan/Sunridge Specific Plan Final Environmental Impact Report. November 2001.
- County of Sacramento Waste Management and Recycling, <http://www.sacgreenteam.com/projects/kiefergastoenergy.htm>
- Extension Toxicology Network. <http://extoxnet.orst.edu/>
- Federal Aviation Administration, Department of Transportation Code of Federal Regulations, http://www.access.gpo.gov/nara/cfr/waisidx_04/14cfr77_04.html
- Personal communication with Dana Booth, Sacramento County Environmental Management Department. January and February, 2006.
- Personal communication with Mark Capps, ENSR, Inc., Consultant to Boeing Aircraft. February, 2006.
- Personal communication with Hazardous Materials Sergeant Steve Snelling, California Highway Patrol. January 5, 2006.
- Personal communication with Rodney Fricke, Aerojet Environmental Remediation. January and February, 2006.
- Personal communication with William Hughes, ASE, Inc., Consultant to the U.S. Air Force. January and February, 2006.

4.4 HAZARDS AND HUMAN HEALTH

Rancho Cordova General Plan, <http://gp.cityofranhocordova.org/>

Rancho Cordova Zoning Code,
http://www.cityofranhocordova.org/documents/planning/zoning_code/

Sacramento County General Plan, <http://www.saccounty.net/general-plan/gp-home.html>

Sacramento Metropolitan Air Quality Management District Rules and Regulations,
<http://www.airquality.org/rules/rule902.pdf>

U.S. Environmental Protection Agency Indoor Air Quality and Radon,
<http://www.epa.gov/radon/rnlinks.html> and <http://www.epa.gov/radon/radonqa1.html>